



How States Calculate EV and Hybrid Registration Fees

Austin Igleheart, Policy Specialist, Austin.Igleheart@ncsl.org

January 2023

Many states currently impose additional registration and other [fees on electric vehicles and hybrids](#). Often, these fees are designed to partially offset reduced gas tax revenues states have long faced due to increasing vehicle efficiency, exacerbated by the fact EVs use no gasoline and thus do not pay gas tax. While exactly how a state calculates their own EV fees is not always clear, a couple possible approaches are explained below.

Sometimes these fees are determined based on an estimate of how much an EV owner would pay in gas taxes if they drove a comparable combustion vehicle, although state statutes do not always lay out the specific formula. Estimates of what fee would be equivalent to a gas tax vary depending on the source, and in any case will differ by state. The Environmental Protection Agency has reported that the average new vehicle sold in the U.S. in 2020 had a combined fuel-economy rating of [25.7 miles per gallon](#). Driving 100 miles in that average vehicle would use 3.9 gallons of gas. One approach states might use is taking the average driving distance/gas consumption on a per year basis, multiply it by the state gas tax, and estimate how much an EV or Hybrid driver would have to pay per year for them to pay a roughly equal amount.

Plug-In America, an advocacy group that promotes greater EV adoption, came up with their own calculation for how much the average driver nationwide would pay in gas taxes: with an [average fuel tax](#) of \$0.25/gal for gasoline and \$0.27 for diesel (as of 2020), and an average new vehicle fuel economy of 39.4 mpg (as of 2017) with an average miles driven of 11,467 miles/year, drivers of new gas-powered cars pay about \$73 in state gas tax on average. Again, the actual gas tax varies widely so the calculation would differ state-by-state.

Note: Plug-In America calculates the equivalent fee based on the fuel efficiency of *new cars* – the average fuel efficiency of *all* cars on the road was 22.3mpg in 2017 per the [Bureau of Transportation Statistics](#). States looking to calculate EV fees in this way to make up for gas taxes should consider whether to use a formula based on the fuel economy of all cars, or of newer, more efficient vehicles. Basing it on the efficiency of all ICE vehicles would likely yield a higher equivalent EV fee due to the higher gas taxes paid by less efficient cars, while basing it on the efficiency of new models would assume lower gas consumption, gas tax revenues, and thus a lower equivalent EV fee.

Additionally, several states index registration fees to inflation. Some states may also adjust these fees to compensate for the additional weight of these vehicles, which tend to weigh more than combustion vehicles; NCSL could not locate specific data on the relative costs of road impacts from EVs vs. combustion vehicles in the time provided. However, this concept is illustrated by a couple states who base their registration fees at least in part on vehicle weight (see Michigan below, [Iowa here](#)).

Please note that NCSL takes no position on state legislation or laws mentioned in linked material, nor does NCSL endorse any third-party publications or opinions therein; resources are cited for informational purposes only.

Below are some specific examples of how states have approached this issue. While states do not always include the explicit formula for calculating their EV registration fees, several EV fees we have found roughly match the calculations described above. Others, like Michigan, include more specific guidelines.

Examples of State Calculations of EV Fees

Illinois lawmakers recently doubled the gas tax to [\\$0.38 a gallon](#) – a figure that will go up to about 42 cents after the law required adjusting the amount for inflation. That means the owner of a vehicle that gets 24 mpg and drives 15,000 annual miles will wind up paying around \$262 per year in gas-taxes. Illinois charges a \$100 fee for EV's on top of regular registration fees, for a [total annual fee of \\$251](#).

In **Louisiana**, drivers of gas- and diesel-powered vehicles pay an average of [\\$148 a year](#) in state gas taxes. The state's current Hybrid and EV [registration fees](#) total \$148.50 and \$198.50, respectively, including the base registration fee that is paid by all vehicles.

Michigan, under [Mich. Comp. Laws Ann. §257.801\(7\)/HB 4736 \(2015\)](#), indexes its EV fees based on the motor vehicle fuel tax. Each 1 cent fuel tax increase above 19 cents increases the BEV annual fee by \$5 and the Plug-in Hybrid (PHEV) annual fee by \$2.50. Since 2017, there is also an additional “base fee” for electric and hybrid vehicles, shown below. State law does not explain the calculation of the base fees, but increases the fee based on vehicle weight. The current fees, calculated using a 26.3 cent per gallon gasoline motor vehicle fuel tax, are as follows:

- \$135 additional annual fee for EVs up to 8,000 pounds (\$100 base fee).
- \$47.50 additional annual fee for PHEVs up to 8,000 pounds (\$30 base fee).
- \$235 additional annual fee for EVs over 8,000 pounds (\$200 base fee).
- \$117.50 additional annual fee for PHEVs over 8,000 pounds (\$100 base fee).

North Carolina [conducted a study](#) on the state's transportation investment needs in 2020, pursuant to [Executive Order 80](#) (2018), examining how increased sales of electric and hybrid vehicles will impact transportation revenues and explores revenue policy options. According to this brief, “Using DMV data to approximate the average total taxes and fees paid to support transportation services by vehicle type, EV owners currently pay approximately \$50 less per year than gasoline vehicle owners.... Assuming a 3 percent growth rate in the number of hybrid vehicles and increases in fuel efficiency, hybrid owners can expect to pay approximately \$130 less per year than gasoline vehicle owners by 2030.” The state currently imposes a \$130 EV registration fee on top of regular registration.

Less specifically, **Colorado** considered but did not ultimately pass legislation in 2021 ([HB 21-1205](#)) to create a “road usage equalization fee” for EVs. While the bill did not prescribe a specific formula, it would have directed the state DOT and Dept. of Revenue to convene a working group to determine:

- Whether and to what extent the fee should be adjusted to achieve the goal of maintaining parity between EV owners and owners of ICE vehicles with respect to the aggregate amount in motor vehicle registration fees and motor fuel taxes paid. Among things the group would have been required to consider are how the fee can account for changes in motor fuel tax rates or whether the fee should vary based on other factors;
- Recommendations as to whether the road equalization fee needs to be adjusted to account for changes to motor fuel tax rates;
- Whether the amount of the fee should be different for personal and commercial vehicles; and

Please note that NCSL takes no position on state legislation or laws mentioned in linked material, nor does NCSL endorse any third-party publications or opinions therein; resources are cited for informational purposes only.

- Whether the amount of the fee should vary based on specified factors.